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Title: Stereoscopic Panoramic Image Capture Device

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IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An imaging system comprising:
 - (a) a first image capture device;
 - (b) a second image capture device;
 - (c) a third image capture device;
 - (d) means for combining at least a first portion of a first image captured with said first image capture device with a portion of a second image captured with said second image capture device, to produce a first combined equirectangular image; and
 - (e) means for combining at least a second portion of said first image with at least a portion of a third image captured with said third image capture device to produce a second combined equirectangular image,
wherein said second combined equirectangular image does not comprise a majority of said first portion of said first image.
2. (Original) The imaging system of Claim 1, wherein said first image capture device, said second image capture device, and said third image capture device are provided arcuately relative to one another, no closer than about five degrees apart.
3. (Original) The imaging system of Claim 1, wherein said first image capture device, said second image capture device, and said third image capture device are provided arcuately relative to one another, no closer than about ten degrees apart.
4. (Original) The imaging system of Claim 1, wherein said first image capture device, said second image capture device, and said third image capture device are provided arcuately relative to one another, no closer than about forty-five degrees apart.

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5. (Original) The imaging system of Claim 1, wherein said first image capture device, said second image capture device, and said third image capture device are provided arcuately relative to one another, no closer than about twenty degrees apart.

6. (Original) The imaging system of Claim 1, wherein said first portion of said first image is greater than about twenty percent of said first image, and wherein said portion of said second image is greater than about twenty percent of said second image.

7. (Original) The imaging system of Claim 6, wherein said first portion of said first image is less than about eighty percent of said first image, and wherein said portion of said second image is less than about eighty percent of said second image.

8. (Original) The imaging system of Claim 1, wherein said first portion of said first image is less than about eighty percent of said first image, and wherein said portion of said second image is less than about eighty percent of said second image.

9. (Original) The imaging system of Claim 1, wherein said first image and said second image are substantially rectilinear.

10. (Currently Amended) The imaging system of Claim 1, wherein said first combined image and said second combined image are at least partially part of an equirectangular image.

11. (Original) The imaging system of Claim 1, wherein said second image and said third image are digital images.

12. (Original) The imaging system of Claim 1, further comprising means for sequentially displaying a plurality of combined images in a manner which conveys motion.

13. (Previously Presented) The imaging system of Claim 1, further comprising means for displaying said first combined image and said second combined image as a stereoscopic image.

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14. (Previously Presented) The imaging system of Claim 1, further comprising means for combining said first combined image with a sufficient plurality of images to produce a first combined panoramic image, representing at least about 90 degrees of a scene, and combining said second combined image with a sufficient plurality of images to produce a second combined panoramic image, representing about 90 degrees of a scene, and means for displaying said first combined panoramic image and said second combined panoramic image in a manner which produces a stereoscopic, panoramic image.

15. (Previously Presented) The imaging system of Claim 1, further comprising means for combining said first combined image with a sufficient plurality of images to produce a first combined panoramic image, representing at least about 180 degrees of a scene, and combining said second combined image with a sufficient plurality of images to produce a second combined panoramic image, representing about 180 degrees of a scene, and means for displaying said first combined panoramic image and said second combined panoramic image in a manner which produces a stereoscopic, panoramic image.

16. (Original) The imaging system of Claim 14, further comprising displaying a first set of combined panoramic images and a second set of combined panoramic images in succession, in a manner which produces a succession of visual information.

17. (Previously Presented) The imaging system of Claim 14, further comprising displaying a first set of combined panoramic images and a second set of combined panoramic images in succession, in a manner which produces a stereoscopic panoramic motion picture.

18. (Original) The imaging system of Claim 1, further combining said first combined image and said second combined image with a digital image, to produce a stereoscopic image within said digital image.

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19. (Currently Amended) An imaging system comprising:
- (a) a first image capture device having a first orientation;
 - (b) a second image capture device having a second orientation different from said first orientation;
 - (c) a third image capture device having a third orientation different from said second orientation;
 - (d) a fourth image capture device having a fourth orientation different from said third orientation;
 - (e) means for combining a first image captured with said first image capture device with a second image captured with said second image capture device to produce a first combined equirectangular image; and
 - (f) means for combining a third image captured with said third image capture device with a fourth image captured with said fourth image capture device to produce a second combined equirectangular image.
20. (Original) The imaging system of Claim 19, further comprising means for displaying said first combined image and said second combined image as a stereoscopic image.
21. (Original) The imaging system of Claim 19, wherein said first combined image displays at least about 180 degrees of a scene.
22. (Original) The imaging system of Claim 19, wherein said first combined image represents at least about 300 degrees of a scene.
23. (Currently Amended) A method for producing a stereoscopic image comprising:
- (a) obtaining a first image;
 - (b) obtaining a second image;
 - (c) obtaining a third image;
 - (d) combining a first portion of said first image with a portion of said second image to produce a first combined equirectangular image;

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- (e) combining a second portion of said first image with a portion of said third image to produce a second combined equirectangular image; and
- (f) displaying said first combined equirectangular image and said second combined equirectangular image in a manner which produces a stereoscopic image.

24. (Original) The method of Claim 23, further comprising picking up said first image, said second image, and said third image from a plurality of points defining an arcuate line.

25. (Original) The method of Claim 24, wherein said plurality of points are greater than about five degrees apart, and less than about forty-five degrees apart.

26. (Original) The method of Claim 24, wherein said plurality of points are greater than about ten degrees apart, and less than about twenty degrees apart.

27. (Currently Amended) The method of Claim 23, further comprising displaying a first plurality of combined equirectangular images in sequence and a second plurality of combined equirectangular images in sequence to produce a stereoscopic motion picture.

28. (Previously Presented) The method of Claim 27, wherein said stereoscopic motion picture represents at least about 180 degrees of a scene.

29. (Currently Amended) The method of claim 23, further comprising:
feathering overlapping edges of an image in an image buffer by degrading visibility of pixels in an overlap area prior to merging combining the image into the first combined image.

30. (Currently Amended) An imaging system comprising:
a first image capture unit to capture a first image;
a second image capture unit to capture a second image;
a third image capture unit to capture a third image; and

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a processing unit operationally coupled to the first, second, and third image capture units to receive the first, the second, and the third images, wherein a first portion of the first image can be combined with a portion of the second image to provide a first combined equirectangular image, wherein a second portion of the first image can be combined with a portion of the third image to provide a second combined equirectangular image, and wherein the first and second combined equirectangular images can be displayed to provide a stereoscopic image.

31. (Previously Presented) The imaging system of Claim 30, wherein said first, the second, and the third image capture units are located approximately equidistant from each other along a substantially arcuate path.

32. (Previously Presented) The imaging system of Claim 31, wherein said substantially arcuate path is defined by a substantially spherical body.

33. (Previously Presented) The imaging system of Claim 30, wherein said first and said second image capture units are separated from each other by an angular distance of about 5 degrees to about 45 degrees along an arc, and wherein said second and said third image capture units are separated from each other by about the angular distance along the arc.

34. (Previously Presented) The imaging system of Claim 30, wherein a field of view associated with said first image capture unit overlaps a field of view associated with said second image capture unit by an overlap amount, and wherein the field of view associated with said second image capture unit overlaps a field of view associated with said third image capture unit by the overlap amount.

35. (Previously Presented) The imaging system of Claim 34, wherein the overlap amount is about 10 percent to about 90 percent.

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36. (Previously Presented) The imaging system of Claim 30, wherein a defined image plane associated with said first image capture unit overlaps a defined image plane associated with said second image capture unit by about 1 to about 20 percent.
37. (Previously Presented) The imaging system of Claim 30, wherein said first portion of said first image is between about 20 percent and about 80 percent of said first image, and wherein said portion of said second image is between about 20 percent and about 80 percent of said second image.
38. (Currently Amended) The imaging system of Claim 30, wherein a plurality of said first and said second combined equirectangular images are displayed in sequence to convey motion.
39. (Previously Presented) The imaging system of Claim 30, wherein the first combined image is combined with a sufficient plurality of images to produce a first combined panoramic image, representing about 90 degrees of a scene, and wherein the second combined image is combined with a sufficient plurality of other images to produce a second combined panoramic image, representing about 90 degrees of the scene, and wherein said first combined panoramic image and said second combined panoramic image are displayed to provide a stereoscopic, panoramic image.
40. (Previously Presented) The imaging system of Claim 39, wherein a set of first combined panoramic images and a set of second combined panoramic images are displayed in sequence to provide a stereoscopic, panoramic motion picture.
41. (Currently Amended) An imaging system comprising:
an image capture unit to provide an image; and
a processing unit coupled to the image capture unit to receive a first portion of said image to provide a first monoscopic equirectangular image, and to receive a second portion of said image to provide a second monoscopic equirectangular image.

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42. (Previously Presented) The imaging system of Claim 41, further comprising means for displaying said first monoscopic image and said second monoscopic image as a stereoscopic image.

43. (Currently Amended) The imaging system of Claim 41, further comprising: a plurality of image capture units coupled to the processing unit, the plurality of image capture units to provide a plurality of images, wherein selected ones of the plurality of images are combined with at least one other image to produce a plurality of combined equirectangular images, wherein the plurality of combined equirectangular images are combined to provide a first panoramic image and a second panoramic image, and wherein the first panoramic image and the second panoramic image are combined to provide a panoramic, stereoscopic image.

44. (Previously Presented) The imaging system of Claim 43, wherein said first panoramic image displays about 90 degrees of a scene.

45. (Previously Presented) The imaging system of Claim 43, wherein said panoramic, stereoscopic image displays about 180 degrees of a scene.

46. (Previously Presented) The imaging system of Claim 43, further comprising a means to display the panoramic, stereoscopic image coupled to the processing unit.

47. (Previously Presented) The imaging system of Claim 13, wherein the stereoscopic image forms a portion of a 360 degree panoramic stereoscopic image.

48. (Previously Presented) The imaging system of Claim 20, wherein the stereoscopic image forms a portion of a 360 degree panoramic stereoscopic image.

49. (Previously Presented) The method of Claim 27, wherein each stereoscopic image that comprises the stereoscopic motion picture forms a portion of a 360 degree panoramic stereoscopic image.

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50. (Previously Presented) The imaging system of Claim 39, wherein the stereoscopic, panoramic image forms a portion of a 360 degree panoramic stereoscopic image.

51. (Currently Amended) The imaging system of Claim 40, wherein the moving stereoscopic, panoramic ~~image~~ motion picture forms a portion of a 360 degree panoramic stereoscopic image.

52. (Previously Presented) The imaging system of Claim 14, wherein the stereoscopic, panoramic image forms a portion of a 360 degree panoramic stereoscopic image.

53. (Previously Presented) The imaging system of Claim 15, wherein said stereoscopic, panoramic image displays about 360 degrees of a scene.

54. (Previously Presented) The method of Claim 27, wherein said stereoscopic motion picture represents about 360 degrees of a scene.

55. (Previously Presented) The imaging system of Claim 30, wherein the first combined image is combined with a sufficient plurality of images to produce a first combined panoramic image, representing a 360 degree panoramic monoscopic image, and wherein the second combined image is combined with a sufficient plurality of other images to produce a second combined panoramic image, representing a 360 degree panoramic monoscopic image, and wherein said first combined panoramic image and said second combined panoramic image are displayed to provide a stereoscopic, panoramic image.

56. (Previously Presented) The imaging system of Claim 55, wherein said stereoscopic, panoramic image forms a portion of a 360 degree panoramic stereoscopic image.

57. (Previously Presented) The imaging system of Claim 42, wherein said stereoscopic image forms a portion of a 360 degree panoramic stereoscopic image.

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58. (Previously Presented) The imaging system of Claim 43, wherein said panoramic, stereoscopic image displays about 360 degrees of a scene.